

## ABSTRACT

The present invention provides an anchor system for securing a MEMS device to a substrate comprising multiple anchors. A MEMS structure, built in accordance with the one embodiment of the invention, comprises a flexible beam suspended over a substrate and a base  
5 attached to each end of the beam. Each base is supported above the substrate by multiple anchors attached to the surface of the substrate. Each anchor further comprises anchor legs along its sides that support the base off of the substrate. In one embodiment, the anchors of each base are located away from the interface between the beam and the base. In another embodiment, the lengths of the anchor legs of the anchors are made longer along a direction of good side-wall step  
10 coverage than along a direction of poor side-wall step coverage.